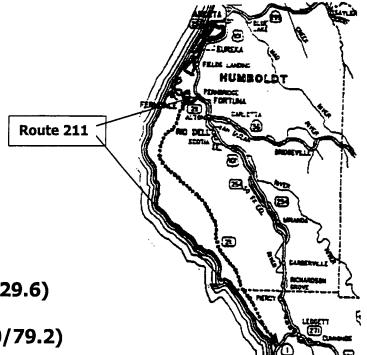
# ROUTE CONCEPT REPORT



**ROUTE 211 CORRIDOR** 

01-MEN-211-KP 0.0/47.7 (PM 0.0/29.6)

01-HUM-211-KP 0.0/127.5 (PM 0.0/79.2)

All information in this Route Concept Report is subject to change as conditions change and new information is obtained.

I approve this Route Concept Report to guide today's route development decisions and/or recommendations.

**Approval Recommended:** 

**Approval Recommended:** 

F. A. WYTHE

Date

**District Division Chief** 

**Project Coordination** 

CHERYL S. WILLIS

**District Division Chief** 

Planning

**Approved:** 

**RICK KNAPP** 

**District Director** 

District 1

**NOVEMBER 1999** 

# ROUTE 211 RCR ROUTE CONCEPT REPORT

#### Statement of Planning Intent

The Route Concept Report (RCR) is a planning document which describes the Department's basic approach to development of a given transportation route or corridor. Considering reasonable financial constraints and projected travel demand over a 20-year planning period, the RCR defines appropriate transportation facilities for each route or corridor. The objective of the effort is to provide a better basis for the development of the State Transportation Improvement Program (STIP), and for determination of the appropriate concept for future transportation projects.

Route Concept Reports are prepared by District staff in cooperation with local and regional agencies. They will be updated as necessary as conditions change or new information is obtained.

Route Concept Reports are a preliminary planning phase that lead to subsequent programming and the project development process. As such, the specific nature of proposed improvements (e.g., roadway width, number of lanes, access control) may change in the project development stage.

#### **Assumptions**

The following assumptions form the basis for the development of Route Concept Reports:

- 1. The relative importance of State highways in the District is generally based on functional classification. In general, higher priority is given to major improvements on principal arterial routes as compared to minor arterials and collectors.
- 2. State highways with improvement concepts must have realistic concept levels of service. Concept levels of service are not established on State highways which will only be maintained (since improvements would not be made to address level of service concerns).
- 3. Level of service calculations are based on the 1994 Highway Capacity Manual (see Appendix A).
- 4. Determinations of future level of service for State highways in District 1 are based in part upon Statewide and Regional forecasts of State highway travel developed by Caltrans.
- 5. Route concepts are generally uniform for an entire route or corridor, unless there is a major change in function along the route or corridor.
- 6. Major projects will be developed to meet standards acceptable to the Federal Highway Administration in order to receive Federal funding for projects. Otherwise, a "design exception" will be prepared during the project development process.
- 7. Safety projects will be pursued on an on-going basis in order to be responsive to safety concerns as they are identified.
- 8. No planned or programmed improvements were assumed to be complete in analyzing present and future operating conditions. The Route Concept Report details programmed improvements in the 1998 STIP, with all costs in 1998 dollars.
- 9. An environmental document will not be required for Route Concept Reports. However, individual improvement projects identified in Route Concept Reports will follow the appropriate environmental process as required by law.

# **ROUTE CONCEPT REPORT**

## **ROUTE 211**

01-MEN-211-KP 0.0/47.7 (PM 0.0/29.6)

01-HUM-211-KP 0.0/127.5 (PM 0.0/79.2)

## I. ROUTE CONCEPT AND RATIONALE

#### **FACILITY CONCEPT**

The concept for Route 211 in Humboldt and Mendocino Counties is a 2-lane conventional highway on existing alignment.

Route 211 originates at Route 1, just north of the community of Rockport and traverses the northern Mendocino and Southern Humboldt coasts in a generally northern direction to Route 101 near Fernbridge. Route 211 is not adopted or constructed to State standards between Route 1, just north of Rockport in Mendocino County and Ocean Avenue in Ferndale, a distance of approximately 166 kilometers (103 miles). The constructed section of Route 211 is approximately ten kilometers (six miles) in length from Ocean Avenue in Ferndale to the junction of Route 101.

Route 211 is used primarily to provide the city of Ferndale with access to Route 101. As such, it should remain a 2-lane conventional highway/expressway on existing alignment.

## **LEVEL OF SERVICE CONCEPT**

# No level of service concept has been selected for Route 211.

Level of service decreases are anticipated as traffic volumes increase; however, no improvements will be made to address level of service reductions.

#### **ROUTE CONCEPT FUNCTION**

This Route Concept should serve as a guide for long range planning of Route improvements. It will protect the state's investment in Route 211, while recognizing financial constraints, which will not allow the programming of extensive improvements for all highways.

# II. ROUTE MANAGEMENT STRATEGIES

#### **CONCEPT FOR REHABILITATION**

The constructed portion of Route 211 should be maintained and rehabilitated as necessary.

Functional classification and maintenance service levels indicate that Route 211 should be rehabilitated on an exception basis only. However, much of Route 211 is a relatively high-speed expressway with moderately high traffic volumes. Therefore, the constructed portion of Route 211 should be rehabilitated as necessary at its present width and on existing alignment. Further we recommend that the maintenance service level of this Route be revised to allow rehabilitation on a regular basis

Current rehabilitation standards (3-R) in the Caltrans Highway Design Manual indicate that Route 211 is wide enough to permit rehabilitation at present width over the constructed segment.

This Route may be resurfaced, as necessary, through the Capital Preventative Maintenance Program (CAPM).

#### SAFETY AND OPERATIONAL IMPROVEMENT STRATEGY

While no segment of Route 211 has an accident rates greater than 1.5 times (150% of) the expected Statewide average; further, safety improvements at spot locations will be considered as necessary.

Bridge replacement, storm damage and operational improvement projects will also be considered as necessary. These projects, in addition to safety projects, should be constructed to appropriate State and Federal standards.

In the late 1980's, Caltrans barrier striped two-lane highways to comply with Federally mandated standards. This reduced the number of passing opportunities (and the level of service) on most two-lane State highways, including Route 211. The impact of barrier striping is expected to be less severe on Route 211 than on some other Routes within the District, since several passing opportunities remain available.

#### **GOODS MOVEMENT STRATEGY**

Route 211 is a major all-weather Route serving the communities of Ferndale, Capetown, Petrolia and Honeydew. It is used to transport food and other essential supplies to these communities along this route, and to transport goods (primarily dairy and timber products) to market.

Consistent with the relatively low truck traffic volumes on this Route, no goods movement improvement projects are planned at this time.

#### **NON-MOTORIZED FACILITIES STRATEGY**

Shoulders on Route 211 are generally adequate to accommodate bicyclists and pedestrians. The portion of Route 211 from the beginning of the Eel River Bridge to its junction with Route 101 has narrow paved shoulders up to 0.3 meters (1 ft.) in width. Upgrading shoulders on the Eel River Bridge may not be feasible, due to its historic status.

We will work with Humboldt County Association of Governments to improve bicycle and pedestrian facilities in the Route 211 corridor, as feasible.

#### **CORRIDOR PRESERVATION STRATEGY**

It is anticipated that Route 211 will remain a 2-lane expressway/conventional highway, on existing alignment. No substantial long-term right of way needs are anticipated.

# III. ALTERNATIVE CONCEPTS CONSIDERED

No alternative concepts were considered for Route 211 in District 1.

# IV. ROUTE ANALYSIS

#### **DESCRIPTION**

Route 211 serves as a link between Route 101 and the City of Ferndale in Humboldt County. The Route is approximately 175 kilometers (109 miles) in length, although only about 10 kilometers (6 miles) of the route are currently a part of the State Highway System. Route 211 is unadopted and unconstructed (not constructed to State standards) between Route 1, just north of Rockport in Mendocino County, and Ocean Avenue in the City of Ferndale in Humboldt County (MEN-211-KP 0.0/47.7 (PM 0.0/29.6) and HUM-211-KP 0.0/117.8 (PM 0.0/73.2)). The constructed portion of Route 211 is a Rural Major Collector (HUM-211- KP (PM 73.2/79.2), traversing the Eel River Valley in a northeasterly direction from Ferndale to Route 101 near Fernbridge.

#### **ROUTE PURPOSE**

Route 211 links the Lower Eel River Valley dairy community of Ferndale (an incorporated city with a population of approximately 1400) with Route 101, the region's north-south principal arterial. Route 211 provides the primary access for people in the Lower Eel River Valley to Eureka, the county seat and business center, and other cities and communities located along Route 101.

The Route is not included in the State's Freeway and Express System and is not eligible for designation as a Scenic Highway. Route 211 is not designated as a SHELL (Subsystem of Highways for Extra Legal Load) Route for use by trucks carrying extra

legal loads, and is not included in the national network for STAA (Surface Transportation Assistance Act) trucks. STAA trucks are not allowed on the Route.

There are no major parks along Route 211; however, the Route does provide recreational access to the ocean beaches via connecting County roads. The commercial center of Ferndale has been restored and is called the Victorian Village. It attracts numerous visitors as well as serving the Ferndale's commercial needs.

#### **ROUTE SEGMENTATION**

Route 211 is segmented below for System Planning purposes:

TABLE 1
ROUTE 211 SEGMENTATION

SEG	MEN/HUM		DESCRIPTION
#	KP	PM	
1	MEN-0.0/47.7	0.0/29.6	Route 1 to HUM/MEN County line (unconstructed)
2	HUM-0.0/117.8	0.0/73.2	MEN/HUM County line to Ocean Ave in Ferndale (unconstructed)
3	HUM-117.8/127.5	73.2/79.2	Ocean Ave. in Ferndale to Route 101

#### LAND USE

Land use adjacent to Route 211 is generally agricultural (dairy farming). Residential and commercial development is concentrated in and around the City of Ferndale and the community of Fernbridge.

#### **EXISTING FACILITIES**

Table II on the following page will summarize existing facility characteristics for the Route 211 corridor in District 1

#### PROGRAMMED IMPROVEMENTS

There are no programmed improvements in the 1998 State Transportation Improvement Program (STIP) or the 1998 State Highway Operation and Protection Program (SHOPP).

## **TABLE II EXISTING FACILITY CHARACTERISTICS ROUTE 211**

SEG	MEN/HUM		DESCRIPTION	EXISTING
#	KP	PM		FACILITY
1	MEN-0.0/47.6	0.0/29.6	Route 1 to HUM/MEN County line	unconstructed)
2	HUM-0.0/117.8	0.0/73.2	MEN/HUM County line to Ocean Ave in Ferndale	unconstructed)
3	HUM-117.8/127.5	73.2/79.2	Ocean Ave. in Ferndale to Route 101	2-C/E

F = Freeway E = ExpresswayC = Conventional

Functional Classification	Rural Major Collector

Eligible for Federal Funding	Yes
Freeway and Expressway System	No
Eligible for Scenic Highway Designation	No
Subsystem of Highways for	

Extra Legal Loads (SHELL)

No

Surface Transportation Assistance Act

(STAA) Trucks Allowed: No Strategic Highway Network No National Highway System No Interregional Road System No **Public Airports Served** None

Rail Service Intersects NWP at Fernbridge

**Intercity Bus Service** None **Intersecting State Highway Routes** 1, 101 Park and Ride Lots None

## **OPERATING CONDITIONS**

Present and future operating conditions, including traffic volume ranges, level of service, and volume to capacity ratios for both existing and anticipated future conditions for Route 211 are shown on Map 1 on the following page. Further information regarding specific operating and geometric conditions may be found in Caltrans source documents (e.g., the State Highway Inventory, the State Highway Log, and Traffic Volumes on California State Highways, etc.)

# MAP 1 PRESENT AND FUTURE OPERATING CONDITIONS ROUTE 211

HUM-211-KP 117.8/127.5

(PM 73.2/79.2)

Terrain: Level Gradeline: Flat Existing (1998)

2-lane Conventional

3.6 m lanes

6.7-9.8 m paved 3500- 5600 AADT

"C" LOS

V/C = 0.30

Accident Rate = less

than 1.5 times than the

Statewide average

**Future (2020)** 

4550-7280 AADT

"D" LOS

V/C = .41

HUM-211-KP 0.0/117.8

(PM 0.0/73.2)

Terrain: Mountainous

**Existing (1998)** 

Legislatively Designated but not Constructed as a

State Highway

MEN-211-KP 0.0/47.7

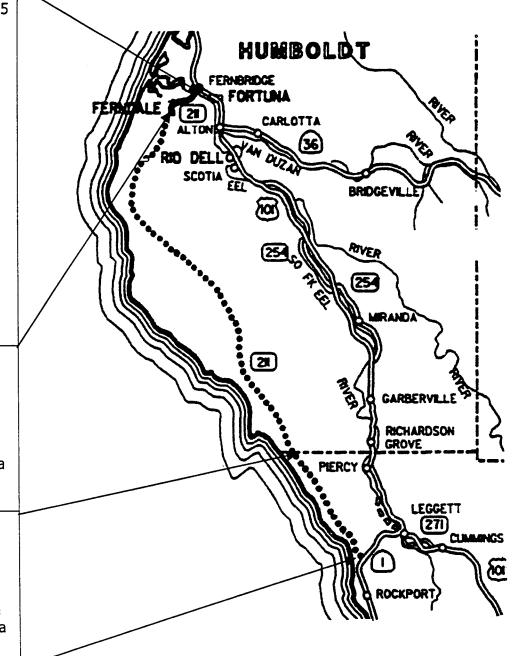
(PM 0.0/29.6)

Terrain: Mountainous

**Existing (1998)** 

Legislatively Designated but not Constructed as a

State Highway



# V. ENVIRONMENTAL CONSIDERATIONS

Environmental considerations along Route 211 include:

- The Eel River, a recreational wild and scenic river, provides important instream and riparian habitat. There are sensitive species associated with the river and its tributaries including a variety of federally listed plants and animals.
- Another principal environmental concern on Route 211 involves the crossing of the Eel River near the river's mouth. Route 211 crosses the Eel River on bridge #4-134 at Fernbridge, a structure that is approximately 1/2 mile long and 22 feet wide. Construction of a new structure was considered due to the narrow width of the existing structure and the steep approach ramps. However, this was not considered feasible due to local support for retaining the historic structure. Instead, the vertical alignment of the approach ramps was improved.
- The water quality of the Eel River is also of significant concern.

# **VI. REGIONAL TRANSPORTATION PLANNING**

The 1996/98 Humboldt County Regional Transportation Plan authored by the Humboldt County Association of Governments (HCOAG) calls for long term maintenance of State Highway Routes. Maintenance issues were noted as follow:

- 1. Some improvements are necessary to improve alignment, grade and safety, particularly in substandard areas.
- 2. Passing lanes are needed in some areas to mitigate Federal barrier striping standards.
- 3. Capacity improvements are recognized as not likely, except on Route 101.

# **VII. AREAS OF CONCERN**

The following criteria are used to identify areas of concern on Route 211 based on an analysis of level of service and accident history:

- 1. A segment is considered to be a "level of service concern" if the concept level of service (LOS) will not be achieved under present or future traffic conditions, or the segment operates at capacity during peak hour.
- 2. A segment is considered to be a "safety concern" if the total accident rate for a fiveyear period for that segment exceeds one and one-half times the Statewide average for similar facilities.

Based on these criteria, no areas of concern were identified on Route 211 in District 1.

# VIII. IMPROVEMENTS NECESSARY TO ACHIEVE THE ROUTE CONCEPT

Consistent with the route concept of Maintain Only, no new facility improvements will be required. Safety improvements should be made, as necessary and operational improvements should be considered on a limited basis.

# IX. TRANSIT AND HIGH OCCUPANCY VEHICLE (HOV) CONSIDERATIONS

Low population densities make it difficult to provide cost-effective transit services for Route 211. Due to the rural nature of Route 211, and relatively low peak hour traffic volumes during commute hours, no HOV considerations are necessary.

# X. ACCESS MANAGEMENT

Access management involves managing where vehicles are allowed to enter the highway, to improve highway operations and reduce accidents.

Over one-half of the constructed portion of Route 211 is already expressway, with limited highway access. In other locations, some access openings may have less than desirable sight distance. Overall, access management is generally not a concern on this Route, and is not likely to be a future concern.

# XI. ADOPTIONS, RESCISSIONS AND RELINQUISHMENTS

New or changed highway routings generally require adopting a new route and rescinding the previously adopted route. The Route may also be relinquished to a city, county or other public entity.

No significant adoptions, recessions, or relinquishments are anticipated on Route 211 in District 1.